

Heights of rivers referred to zeros of gages—Continued.

Stations.	Distance to mouth of river.	Danger line on gage.	Highest water.		Lowest water.		Mean stage.	Monthly range.
			Height.	Date.	Height.	Date.		
<i>Santee River.</i>	<i>Miles.</i>	<i>Feet.</i>	<i>Feet.</i>		<i>Feet.</i>		<i>Feet.</i>	<i>Feet.</i>
St. Stephens, S. C.	50	12	7.0	5, 6	0.3	25	3.2	6.7
<i>Congaree River.</i>								
Columbia, S. C.	37	15	2.5	1	-0.3	12	0.6	2.7
<i>Watauga River.</i>								
Camden, S. C.	45	24	14.0	1	2.9	21	5.1	12.1
<i>Waccamaw River.</i>								
Conway, S. C.	40	7	2.8	9, 10, 27	1.6	2, 30	2.3	1.2
<i>Savannah River.</i>								
Calhoun Falls, S. C.	347		4.0	26	2.0	14, 17-20	2.4	2.0
Augusta, Ga.	298	33	11.3	27	4.9	13	6.2	6.4
<i>Broad River.</i>								
Carlton, Ga.	30		3.7	27	2.0	5-14, 17-22	2.3	1.7
<i>Flint River.</i>								
Albany, Ga.	80	30	2.6	30	0.2	13	0.9	2.4
<i>Chattahoochee River.</i>								
West Point, Ga.	289	20	4.2	30	1.9	3-14, 22	2.3	2.3
<i>Cosa River.</i>								
Rome, Ga.	225	30	3.0	27	0.3	7-13	0.9	2.7
Gadsden, Ala.	144	18	3.0	27, 28	-0.8	12-15, 18-22	0.1	3.8

Heights of rivers referred to zeros of gages—Continued.

Stations.	Distance to mouth of river.	Danger line on gage.	Highest water.		Lowest water.		Mean stage.	Monthly range.
			Height.	Date.	Height.	Date.		
<i>Alabama River.</i>	<i>Miles.</i>	<i>Feet.</i>	<i>Feet.</i>		<i>Feet.</i>		<i>Feet.</i>	<i>Feet.</i>
Montgomery, Ala.	265	35	4.0	28	-0.1	7-16	0.6	4.1
Selma, Ala.	212	35	4.8	30	-1.3	16-18	-0.2	6.1
<i>Tombigbee River.</i>								
Columbus, Miss.	285	33	-0.2	30	-3.7	2, 5, 6, 18	-2.9	3.5
Demopolis, Ala.	155	35	5.6	30	-3.6	10-21	-2.5	9.2
<i>Black Warrior River.</i>								
Tuscaloosa, Ala.	90	43	10.5	28	-1.0	1-20	0.3	11.5
<i>Columbia River.</i>								
Umatilla, Ore.	270	25	6.1	24	4.0	7, 8	4.9	2.1
The Dalles, Ore.	166	40	9.9	30	5.4	8	6.9	4.5
<i>Willamette River.</i>								
Albany, Ore.	99	30	14.9	30	2.6	6, 7	3.7	12.3
Portland, Ore.	10	15	12.5	30	3.2	1, 2	5.6	9.3
<i>Sacramento River.</i>								
Red Bluff, Cal.	241	23	13.0	28	0.0	1	4.8	13.0
Sacramento, Cal.	70	29	19.4	13	10.4	8, 9	15.6	9.0

* Distance to Gulf of Mexico.

CLIMATE AND CROP SERVICE.

By JAMES BERRY, Chief of Climate and Crop Service Division.

The following extracts relating to the general weather conditions in the several States and Territories are taken from the monthly reports of the respective sections of the Climate and Crop Service. The name of the section director is given after each summary.

Rainfall is expressed in inches.

Alabama.—The mean temperature was 55.8°, or 2.1° above normal; the highest was 83°, at Healing Springs on the 16th, and the lowest, 18°, at Hamilton on the 4th. The average precipitation was 3.04, or 0.06 below normal; the greatest monthly amount, 6.55, occurred at Wilson, and the least, 1.01, at Highland Home.—*F. P. Chaffee.*

Arizona.—The mean temperature was 54.5°, or 2.2° above normal; the highest was 97°, at Arivaca on the 7th, and the lowest, 14°, at Flagstaff on the 21st. The average precipitation was 0.65, or 0.49 below normal; the greatest monthly amount, 2.07, occurred at Yarnell, while none fell at several stations.—*W. G. Burns.*

Arkansas.—The mean temperature was 54.3°, or 3.8° above normal; the highest was 87°, at Prescott on the 7th, and the lowest, 17°, at Pond on the 3d. The average precipitation was 2.61, or 1.51 below normal; the greatest monthly amount, 5.86, occurred at Hardy, and the least, 1.40, at Lee Brand.

The wheat crop is in fine condition for this season of the year, and reports indicate a larger acreage has been sown than usual.—*E. B. Richards.*

California.—The mean temperature for the State, obtained by weighting the reports from 293 stations, so that equal areas have about the same weight, was 52.1°, which was 0.8° above the November normal for the State, as determined from 209 records; the highest was 105°, at Ogilby, San Diego County, on the 11th; the lowest, 7°, at Bodie, Mono County, on the 16th. The average precipitation for the State, as determined by the records of 309 stations, was 3.82; the excess, as indicated by reports from 217 stations, which have normals, was 2.00; the greatest monthly amount, 32.85, occurred at Upper Mattole, Humboldt County, while none fell at Ogilby, San Diego County.—*Alexander G. McAdie.*

Colorado.—The mean temperature was 38.9°, or 5.2° above normal; the highest was 78°, at Lamar on the 9th and at Wray on the 14th, and the lowest, 11° below zero, at Troutvæ on the 19th. The average precipitation was 0.77, or practically normal; the greatest monthly amount, 3.72, occurred at Santa Clara, while none fell at Laporte, Waterdale, Moraine, and Gypsum.—*F. H. Brandenburg.*

Florida.—The mean temperature was 65.7°, or 0.5° above normal; the highest was 87°, at Ocala on the 2d, and the lowest, 34°, at Dalketh and De Funiak Springs on the 4th. The average precipitation was 0.82, or 1.91 below normal; the greatest monthly amount, 4.99, occurred at Pensacola, and the least, trace, at New Smyrna.—*A. J. Mitchell.*

Georgia.—The mean temperature was 55.9°, or 1.6° above normal; the highest was 86°, at Morgan on the 1st, and the lowest, 24°, at Greenbush and Ramsey on the 5th. The average precipitation was 2.04, or 0.74 below normal; the greatest monthly amount, 4.05, occurred at Greenbush, and the least, 0.37, at Albany.—*J. B. Marbury.*

Idaho.—The mean temperature was 40.6°, or 7.8° above normal; the highest was 85°, at American Falls on the 6th, and the lowest, 8°, at

Chesterfield on the 26th. The average precipitation was 2.12, or 0.30 below normal; the greatest monthly amount, 10.42, occurred at Priest River, and the least, 0.21, at Hagerman.—*S. M. Blandford.*

Illinois.—The mean temperature was 46.7°, or 6.5° above normal; the highest was 80°, at Centralia on the 11th, and the lowest, 13°, at Scales Mound on the 4th. The average precipitation was 1.83, or 1.02 below normal; the greatest monthly amount, 3.59, occurred at Paris, and the least, 0.56, at Dixon.

Winter wheat throughout the central and southern districts is generally in splendid condition; it has good root growth and in some instances too heavy top growth, requiring pasturing. In the northern district little wheat was sown, but that is in good condition.—*C. E. Linney.*

Indiana.—The mean temperature was 46.0°, or 4.8° above normal; the highest was 75°, at Connersville and Vevay on the 10th and at Washington on the 17th, and the lowest, 19°, at Fairmount and Winamac on the 6th. The average precipitation was 2.54, or 1.25 below normal; the greatest monthly amount, 4.41, occurred at Paoli, and the least, 0.78, at Culver.

Warm weather and good local rains were very favorable for all crops. Wheat grew rapidly; it is in good condition for wintering, being deep rooted and healthy. Farm work progressed with very few interruptions.—*C. F. R. Wappenhans.*

Iowa.—The mean temperature was 43.9°, or about 10.0° above normal; the highest was 86°, at Burlington on the 17th, and the lowest, 8°, at Primghar on the 2d. The average precipitation was 1.20, or below normal; the greatest monthly amount, 2.97, occurred at Belle Plaine, and the least, 0.13, at Estherville.—*J. R. Sage, Director; G. M. Chappel, Assistant.*

Kansas.—The mean temperature was 48.4°, or about 7.0 above normal; the highest was 81°, at Englewood on the 9th, at Fallriver on the 10th, and at Chanute on the 15th, and the lowest, 1°, at Colby on the 21. The average precipitation was 1.34, or about 0.40 above normal; the greatest monthly amount, 2.75, occurred at Columbus, and the least, 0.21, at Campbell.—*T. B. Jennings.*

Kentucky.—The mean temperature was 49.8°, or about 4.0° above normal; the highest was 79°, at Princeton on the 13th, and the lowest, 20°, at Loretto on the 3d. The average precipitation was 2.12, or 1.50 below normal; the greatest monthly amount, 3.97, occurred at Henderson, and the least, 0.88, at Alpha.

Owing to the droughty conditions that prevailed in the early autumn, plowing was badly delayed and the bulk of the wheat crop was sown later than usual. It was feared by many that it would not get sufficiently well rooted to stand severe winter weather, but it made splendid progress during November and is in excellent condition.—*H. B. Hervey.*

Louisiana.—The mean temperature was 60.0°, or 1.9° above normal; the highest was 90°, at White Sulphur Springs on the 1st, and the lowest, 21°, at Alexandria, Oxford, and Plain Dealing on the 4th. The average precipitation was 2.30, or 1.84 below normal; the greatest monthly amount, 5.67, occurred at Oak Ridge, and the least, 1.17, at Houma.—*W. T. Blythe.*

Maryland and Delaware.—The mean temperature was 45.3°, or 0.2° above normal; the highest was 75°, at Milford, Del., on the 1st, and the lowest, 12°, at Sunnyside, Md., on the 7th, 27th, and 28th. The average precipitation was 1.98, or 1.31 below normal; the greatest monthly amount, 3.65, occurred at Bachmans Valley, Md., and the least, 0.63, at Princess Anne, Md.

The mild weather conditions favored rapid growth in wheat, and, with but few exceptions, the crop was in good condition.—*F. J. Wals.*

Michigan.—The mean temperature was 40.6°, or 5.5° above normal; the highest was 68°, at St. Ignace on the 6th and at Grand Rapids on the 7th, and the lowest, 11°, at Iron River on the 3d. The average precipitation was 1.20, or 1.62 below normal; the greatest monthly amount, 2.79, occurred at Ball Mountain, and the least, 0.02, at Baraga.—*O. F. Schneider.*

Minnesota.—The mean temperature was 39.6°, or about 12.0° above normal; the highest was 80°, at Bermidji on the 15th, and the lowest, 9°, at Detroit City on the 2d. The average precipitation was 0.63, or 0.38 below normal; the greatest monthly amount, 2.55, occurred at Willmar, and the least, 0.16, at Brainerd.—*T. S. Ouram.*

Mississippi.—The mean temperature was 66.6°, or about 2.0° above normal; the highest was 87°, at Americus on the 2d, and the lowest, 31°, at Pontotoc on the 6th. The average precipitation was 2.42, or about 1.00 below normal; the greatest monthly amount, 5.82, occurred at Americus, and the least, 0.85, at Vicksburg.—*H. E. Wilkinson.*

Missouri.—The mean temperature was 49.5°, or 7.6° above normal; the highest was 82°, at Mount Vernon on the 16th, and the lowest, 16°, at Bethany on the 3d and 4th, at Liberty and Pickering on the 4th, and at Potosi on the 5th. The average precipitation was 1.90, or 0.56 below normal; the greatest monthly amount, 5.29, occurred at Willowsprings, and the least, 0.69, at Windsor.

The month was an ideal one for farm work and could hardly have been more favorable for the wheat crop, which was reported in excellent condition in nearly every county. As a result of the unusually warm weather, wheat in some districts made very rank growth, and many fields were pastured.—*A. E. Hackett.*

Montana.—The mean temperature was 39.6°, or 9.9° above normal; the highest was 80°, at Red Lodge on the 10th, and the lowest, 7°, at Fort Logan on the 25th, at Glasgow on the 28th, and at Kipp on the 30th. The average precipitation was 0.44, or 0.70 below normal; the greatest monthly amount, 2.84, occurred at Troy, while none fell at Martinsdale.—*H. J. Glass.*

Nebraska.—The mean temperature was 43.4°, or 8.7° above normal; the highest was 80°, at Fairbury on the 18th, at Palmer on the 11th, at Superior on the 10th and 16th, and at Westpoint on the 17th, and the lowest, 1° below zero, at Lodgepole on the 2d. The average precipitation was 0.88, or 0.18 above normal; the greatest monthly amount, 2.75, occurred at Bartley, while none fell at Merriman and Seneca.—*G. A. Loveland.*

Nevada.—The mean temperature was 41.0°, or about 2.0° above normal; the highest was 73°, at Las Vegas on the 9th, and the lowest, 3°, at Fenelon on the 25th. The average precipitation was 0.51, or about 0.25 below normal; the greatest monthly amount, 3.41, occurred at Lewers Ranch, while none fell at Battle Mountain and Toano.—*J. H. Smith.*

New England.—The mean temperature was 37.1°, or normal; the highest was 71°, at Vineyard Haven, Mass., on the 1st, and the lowest, 5° below zero, at Enosburg Falls, Vt., on the 12th. The average precipitation was 2.16, or 1.76 below normal; the greatest monthly amount, 5.65, occurred at Bar Harbor, Me., and the least, 1.04, at Block Island, R. I.

The weather was highly favorable for work on the farm, but farmers continued to be greatly inconvenienced by the scarcity of water for stock, being compelled in many localities to haul the supply from streams and rivers.—*J. W. Smith.*

New Jersey.—The mean temperature was 44.0°, or 0.7° above normal; the highest was 71°, at Toms River and Vineland on the 11th, and the lowest, 17°, at Belvidere on the 14th, 26th, and 27th, and at Rivervale on the 14th. The average precipitation was 2.29, or 1.37 below normal; the greatest monthly amount, 4.32, occurred at New Brunswick, and the least, 0.72, at Ocean City.—*E. W. McGann.*

New Mexico.—The mean temperature was 39.7°, or 1.5° above normal; the highest was 82°, at Mesilla Park on several days, and the lowest, 5°, at Folsom on the 2d. The average precipitation was 0.78, or 0.21 above normal; the greatest monthly amount, 3.21, occurred at Roswell, while none fell at Engle and Strauss.—*R. M. Hardinge.*

New York.—The mean temperature was 38.6°, or 0.9° above normal; the highest was 67°, at Cutchogue on the 1st and at Ogdensburg on the 6th, and the lowest, 5°, at Number Four on the 13th. The average precipitation was 2.18, or 1.05 below normal; the greatest monthly amount, 3.58, occurred at Addison, and the least, 0.49, at Lockport.

The month was very mild and most favorable for grains. Winter wheat and rye were exceptionally fine and promising, with a good stand, large growth, healthy color, and firm roots. Wheat is larger and in better condition for winter weather than it has been at this season for several years. The acreage is somewhat less than the average.—*R. G. Allen.*

North Carolina.—The mean temperature was 51.0°, or 1.3° above normal; the highest was 78°, at several stations on various dates, and the lowest, 20°, at Waynesville on the 5th and at Linville on the 7th. The average precipitation was 1.54, or 1.72 below normal; the greatest monthly amount, 3.83, occurred at Highlands, and the least, 0.24, at Lenoir.

The weather was highly favorable for farm work and for completing the seeding of winter wheat. Fine stands and vigorous growths were generally secured. In general the condition at the close of the month was excellent.—*C. F. von Herrmann.*

North Dakota.—The mean temperature was 36.3°, or 16.6° above normal; the highest was 68°, at Power on the 3d, at Devils Lake, Forman, Melville, and Bismarck on the 5th, and the lowest, 2°, at Gallatin on the 2d. The average precipitation was 0.32, or 0.63 below normal; the greatest monthly amount, 0.85, occurred at Napoleon, and the least, trace, at Buxton, Dunseith, Grafton, Hannaford, Oakdale, Portal, and Powell.—*B. H. Bronson.*

Ohio.—The mean temperature was 43.9°, or 3.2° above normal; the highest was 79°, at Richwood on the 11th, and the lowest, 18°, at Bladensburg on the 7th and at Milligan, Pataskala, and Warsaw on the 27th. The average precipitation was 1.72, or 1.60 below normal; the greatest monthly amount, 3.04, occurred at Kenton, and the least, 0.62, at Cleveland.

Wheat in most northern counties is in good condition, but in most southern counties, particularly in the southwest, the damage by hessian fly is very serious.—*J. Warren Smith.*

Oklahoma.—The mean temperature was 52.9°; the highest was 90°, at Kingfisher on the 9th, and the lowest, 18°, at Beaver on the 3d. The average precipitation was 4.01; the greatest monthly amount, 7.90, occurred at Fort Sill, and the least, 1.47, at Tulsa.

Sufficient water is now in the soil to make a good crop of wheat without spring rains. Wheat is generally reported as being in the most promising condition since the settlement of the Territory.—*C. M. Strong.*

Oregon.—The mean temperature, was 48.2°, or 4.8 above normal; the highest was 77°, at Dayville on the 14th, and the lowest, 5°, at Riverside on the 4th. The average precipitation was 9.08, or 2.84 above normal; the greatest monthly amount, 35.81, occurred at Glenora, Tillamook County, and the least, 0.75, at Silverlake, Lake County.—*B. S. Pague.*

Pennsylvania.—The mean temperature was 41.5°, or 1.1° above normal; the highest was 72°, at Hawthorn on the 19th, and the lowest, 8°, at Shinglehouse on the 12th. The average precipitation was 2.66, or 0.96 below normal; the greatest monthly amount, 4.86, occurred at Davis Island Dam, and the least, 0.61, at Franklin.—*T. F. Townsend.*

South Carolina.—The mean temperature was 55.0°, or 1.0 above normal; the highest was 86°, at Shaws Fork on the 15th and the lowest, 22°, at Spartanburg on the 7th. The average precipitation was 2.41, or 0.41 below normal; the greatest monthly amount, 8.10, occurred at Georgetown, and the least, 0.72, at Florence.—*J. W. Bauer.*

South Dakota.—The mean temperature was 40.7°, or about 10° above normal; the highest was 76°, at Alexandria on the 16th, and the lowest, 1° below zero, at Menno on the 2d. The average precipitation was 0.38, or 0.21 below normal; the greatest monthly amount, 1.52, occurred at Tyndall, while none fell at Forest City.—*S. W. Glenn.*

Tennessee.—The mean temperature was 51.7°, or about 4.0° above normal; the highest was 82°, at Madison on the 10th, and the lowest, 14°, at Erasmus on the 5th. The average precipitation was 2.18, or 1.54 below normal; the greatest monthly amount, 4.59, occurred at Sewanee, and the least, 0.70, at Union City.

The wheat acreage is reported to be the largest in many years, and the favorable soil and weather conditions promoted good germination and rapid growth, so that the prospects at the end of the month were very flattering.—*H. C. Bates.*

Texas.—The mean temperature, determined by comparison of 45 stations distributed throughout the State, was 1.8° above the normal; there was a slight deficiency over the Rio Grande Valley and a general excess elsewhere, amounting to more than 3.0° over the northwest portion of the State; the highest was 90°, at Hulen on the 11th, and the lowest, 17°, at Mount Blanco on the 3d. The average precipitation, determined by comparison of 54 stations distributed throughout the State, was 0.76 above normal; nearly normal conditions prevailed over west Texas, the eastern portion of north and central Texas and the coast district, while over the other sections of the State there was a general excess, ranging from 1.00 to 4.97, with the greatest in the vicinity of Wichita Falls; the greatest monthly amount, 6.70, occurred at Wichita Falls, and the least, trace, at Fort Ringgold.

Much wheat was sown during November and seeding was completed over the southern portion of the wheat belt early in the month, but over the northwest portion sowing was retarded by the showery weather during the last decade of the month, and is not yet completed; heavy local rains in a few localities over the northwest portion washed up some wheat, otherwise conditions were beneficial to the crop. The crop as a whole is late, but doing well, and was reported in excellent condition in most localities at the close of the month.—*I. M. Cline.*

Utah.—The mean temperature was 40.5°, or 4.5° above normal; the highest was 82°, at Croydon on the 7th, and the lowest, 3° below zero, at Woodruff on the 26th. The average precipitation was 0.70, or 0.13 below normal; the greatest monthly amount, 2.30, occurred at Croydon, and the least, trace, at Cisco, Loa, and Terrace.—*L. H. Murdock.*

Virginia.—The mean temperature was 47.7°, or nearly normal; the

highest was 83°, at Rocky Mount on the 2d, and the lowest, 16° at Burkes Garden on the 7th. The average precipitation was 1.24, or 1.54 below normal; the greatest monthly amount, 2.96, occurred at Miller School, and the least, 0.38, at Cliftonforge.

The progress of the crops and farm work was highly satisfactory, reports from all portions of the State where winter wheat is grown indicate this crop to be making excellent progress and as being generally in advance of its normal condition at this time.—*E. A. Evans.*

Washington.—The mean temperature was 50.4°, or 6.5° above normal, and the highest ever recorded since the establishment of the Washington service in 1890; the highest was 72°, at Walla Walla on the 14th, and the lowest, 25°, at Moxee on the 5th, at Usk on the 15th, and at Ellensburg on the 22d. The average precipitation was 8.82, or 2.77 above normal; the greatest monthly amount, 29.87, occurred at Neah, and the least, 0.43, at Connell.—*A. B. Wollaber.*

West Virginia.—The mean temperature was 45.6°, or 1.6° above normal; the highest was 83°, at Uppertrack on the 2d, and the lowest, 14°, at Dayton on the 26th. The average precipitation was 1.93, or 0.86 below normal; the greatest monthly amount, 3.49, occurred at Rowelsburg, and the least, 0.48, at Oldfields.—*E. C. Voss.*

Wisconsin.—The mean temperature was 40.3°, or 8.2° above normal; the highest was 72°, at Westbend on the 21st, and the lowest, 10°, at Osceola and Valley Junction on the 3d. The average precipitation was 1.07, or 0.56 below normal; the greatest monthly amount, 3.64, occurred at Sharon, and the least, trace, at Florence.—*W. M. Wilson.*

Wyoming.—The mean temperature was 36.4°, or 4.6° above normal; the highest was 80°, at Burlington on the 16th, and the lowest, 4° below zero, at Jackson. The average precipitation was 0.13, or less than one-fifth of the normal; the greatest monthly amount, 0.91, occurred at Rawlins, while none fell at several stations.—*W. S. Pomeroy.*

SPECIAL CONTRIBUTIONS.

OBSERVATIONS AT HONOLULU.

Through the kind cooperation of Mr. Curtis J. Lyons, Meteorologist to the Government Survey, the monthly report of meteorological conditions at Honolulu is now made partly in accordance with the new form, No. 1040, and the arrangement of the columns, therefore, differs from those previously published.

Meteorological observations at Honolulu, November, 1899.

The station is at 21° 18' N., 157° 50' W.
Pressure is corrected for temperature and reduced to sea level, and the gravity correction, —0.06, has been applied.

The average direction and force of the wind and the average cloudiness for the whole day are given unless they have varied more than usual, in which case the extremes are given. The scale of wind force is 0 to 12, or Beaufort scale. Two directions of wind, or values of wind force or amounts of cloudiness, connected by a dash, indicate change from one to the other.

The rainfall for twenty-four hours has always been measured at 10:29 p. m., not 1 p. m., Greenwich time, on the respective dates.
The rain gauge, 8 inches in diameter, is 1 foot above ground. Thermometer, 9 feet above ground. Ground is 43 feet, and the barometer 50 feet above sea level.

Date.	Pressure at sea level.	Temperature.		During twenty-four hours preceding 1 p. m., Greenwich time, or 2:29 a. m., Honolulu time.								Total rainfall at 9 a. m., local time.	
				Temperature.		Means.		Wind.		Average cloudiness.	Sea-level pressures.		
		Dry bulb.	Wet bulb.	Maximum.	Minimum.	Dew-point.	Relative humidity.	Prevailing direction.	Force.		Maximum.		Minimum.
1.....	* 30.02	70	62	76	67	61.7	63	nne.	5	30.03	30.01	0.02	
2.....	30.01	72	64	77	65	56.3	56	n-ne.	2-4	5	30.06	29.96	0.00
3.....	30.01	72	64.5	77	71	59.7	61	nne.	3-4	3	30.03	29.98	0.00
4.....	30.03	73	65.5	78	71	62.5	65	ne.	5-3	3	30.03	29.98	0.00
5.....	30.01	64	61.5	79	72	62.3	64	ne.	3	2	30.06	29.97	0.00
6.....	29.97	64	62	80	64	61.0	70	nne.	1-4-0	2	30.04	29.95	0.00
7.....	29.96	70	67	81	68	64.0	73	nne.	1-0	1-0	30.02	29.92	0.01
8.....	29.98	67	65	82	68	65.7	75	nne.	1	8-1	30.03	29.94	0.00
9.....	30.02	71	69	82	67	65.0	73	ne.	2	5	30.06	29.97	0.08
10.....	30.01	71	65	79	70	66.0	77	ne.	3-0	5	30.06	29.96	0.00
11.....	29.97	73	64.5	80	70	61.5	62	nne.	3	2	30.04	29.95	0.00
12.....	29.92	71	67	80	73	61.0	60	nne.	2-2	2	30.02	29.93	0.05
13.....	29.93	73	66	80	70	63.7	71	ne.	1-4	5-2	30.02	29.88	0.01
14.....	29.98	74	66.5	80	72	62.7	63	ene.	3	2	30.00	29.93	0.01
15.....	30.00	73	65	80	73	63.0	64	ne.	4	4-8	30.04	29.95	0.01
16.....	30.02	73	67	79	73	61.5	65	nne.	4	5-8	30.09	29.97	0.01
17.....	30.00	74	66	79	72	64.5	68	ene.	4	7	30.08	30.00	0.00
18.....	30.08	74	64.5	80	73	61.0	61	nne.	2-5	8-2	30.09	30.02	0.00
19.....	30.04	72	63.5	81	73	62.7	64	nne.	3	3	30.09	29.99	0.00
20.....	30.04	72	65.5	80	72	60.8	59	ene.	3	2	30.10	30.00	0.00
21.....	30.02	73	65	79	71	61.7	66	ene.	3	6	30.10	30.01	0.00
22.....	30.02	72	64	79	73	59.8	59	ne.	3-0	4	30.06	29.97	0.00
23.....	29.98	64	62	81	70	60.7	62	nne.	3-0	3	30.05	29.95	0.00
24.....	29.95	66	62.5	81	64	61.7	72	s-n.	1-0	4	30.03	29.90	0.00
25.....	29.91	64	63	79	63	63.5	77	sw-nw.	1-0	4	29.99	29.90	0.00
26.....	29.98	65	63	79	63	63.7	79	sw-w.	1	1-4	29.97	29.88	0.00
27.....	30.00	69	67	80	64	65.5	81	sw n.	1	3	30.02	29.92	0.06
28.....	30.10	71	65	79	67	64.3	75	n-nne.	2-5	9-8	30.11	30.03	0.21
29.....	30.07	71	66.5	74	67	63.7	75	nne.	4	8	30.16	30.08	0.20
30.....	30.01	71	65	78	71	64.5	73	ne.	3	4-2	30.10	29.99	0.00
Sums..													0.67
Means.	30.00	70.3	64.8	79.3	69.1	62.5	69.1		2.9	3.9	30.010	29.968
Departure..	+ .05					-3.5	-7.6				+ .050	+ .050	-4.85

Mean temperature for November, 1899 (6+2+9), +8=73.5°; normal is 73.8°. Mean pressure for November (9+3)+2 is 30.007; normal is 29.957.

*This pressure is as recorded at 1 p. m., Greenwich time. †These temperatures are observed at 6 a. m., local, or 7:29 p. m., Greenwich time. ‡These values are the means of (6+9+2+9)+4. §Beaufort scale.

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W. F. R. PHILLIPS, in charge of Library, etc.

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- Scientific American. New York. Vol. 81.*
 — The Lecornu Cellular Kite. P. 360.
 — Relation of Rainfall to Boiler Scale. P. 386.
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 Rabot, O. Les variations de longueur des glaciers dans les régions arctiques et boréales (suite). P. 453.
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 — Hagelfall und Trombe in Bizerte. P. 521.
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 Exner, Franz. Beiträge zur Kenntniss der atmosphärischen Electricität. P. 609.